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# AUG 1 5 2006

Serial No. 10/634,295

Docket No. NG(MS)6620

### REMARKS

Claims 1-7 and 9-25 are currently pending in the subject application, and are presently under consideration. Claims 1-7 and 9-25 are rejected. Favorable reconsideration of the application is requested in view of the comments herein.

## I. Rejection of Claims 1-7, 9, 11-16 and 20-25 Under 35 U.S.C. §103(a)

Claims 1-7, 9, 11-16 and 20-25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,278,402 to Pippen ("Pippen") in view of U.S. Patent No. 5,952,959 to Norris ("Norris"). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Pippin discloses a system using GPS navigation signals to aid in distance determination to a plurality of selected points of interest on a golf course that includes a cart-based unit, a hand-held distance determining unit that can be interconnected with the cart based unit, and a central base station that provides GPS correction data to golfers on the golf course to correct for inaccuracies with the GPS signal. Pippen discloses a system for providing differential GPS techniques to golfers to find points of selected interest on a golf course. Differential GPS techniques are employed to correct for inaccuracies in GPS positioning data that is provided to commercial users worldwide. However, U.S. military users can access the GPS precision service, which provides considerable more accuracy. This service can provide precise position accuracy in the delivery highly destructive delivery of payloads, and therefore, is prohibited to commercial users for security purposes.

Norris discloses finding the relative position of two devices in spite of the error (Selective Availability) that was once introduced into the GPS network to reduce the accuracy of the GPS network for nonmilitary users. In the Norris system, the position of a first device is transmitted directly via a transmitter to a second device via a receiver, and the relative location of the devices is determined by subtraction, thus eliminating the common Selective Availability (SA) error associated with the commercial GPS. For the

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SA error to cancel out in this manner, it is necessary for the devices to be within a reasonable distance from one another, as the SA error varies with the device location. Accordingly, the Norris system is only intended for use over distances in which direct RF communication between the devices is possible. The second GPS device of Norris includes a display that provides an arrow that points in the direction of the first GPS device regardless of the direction that the second GPS device is pointed.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

There is no suggestion or motivation in the references for the proposed combination of Pippen and Norris. Norris discloses that a golfer can use a first GPS device that is tuned to a second GPS device located at a golf hole to determine a precise distance and location to aim (SEE FIG. 9 of Norris). There is no suggestion in either reference that one would desire to know the precise location of other golfers on the golf course. Additionally, the combination of Norris which is to circumvent the inaccuracies of commercial GPS would render Pippen unsatisfactory for its intended purpose, and change the principle operation of Pippen, which is a differential GPS system to correct for the inaccuracies of commercial GPS. If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). If the proposed modification of combination of the prior art would change the principle of operation of

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the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Claim 1, for example, recites the use of a tablet computer assembly including a global positioning system module that produces location information associated with the position of the tablet computer assembly and an L-band transceiver that broadcasts the location information directly to a satellite relay and receives location information from at least one portable communications device via the satellite relay. The tablet assembly of claim 1 employs satellite relays to broadcast and receive location information to and from other portable communication devices, and therefore can operate over extremely long ranges, and be mobilized to almost any location in the world.

However, Norris is limited to distances of about 100 feet, which is the transmission range of the RF transmitter of the GPS device. Pippen is limited to the transmission range between the central base station and its golf cart, and has no mobility beyond the golf course in which the central base station resides, nor would it desire to be mobile outside the golf course. Therefore, there would not be any desirability and, thus any suggestion or motivation in either Norris or Pippen to modify the wireless devices to employ am L-band satellite transceiver to broadcast the location information directly to a satellite relay and receive location information from the at least one portable communications device via the satellite relay.

The Examiner admits that neither Norris nor Pippen disclose at least the following 9 elements recited in the claims: an L-band transceiver (Claims 1-7. 9. 11-15) a satellite relay (Claims 1-7. 9. 11-25), power regulating I/O device (Claim 4), a touch screen display (Claim 5), a detachable antenna (Claim 6), a quadrifilar helix antenna (Claim 7), a faraday cage (Claim 9), or a heat sink (Claim 10), and means for software to control power consumption (Claims 23-25).

However, the Examiner states, "Official Notice is given that one of ordinary skill in the art would exchange the portable device with a tablet device; and any type of

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wireless communication including L-band is known in the art and advantages are known. Tablet PCs include software and hardware to control power usage just like laptop. It would have been obvious to one of ordinary skill in the art to use the items in the previous sentence along with a detachable antenna, a faraday cage, and a heat sink because it is design choice. The advantages of using all these items are known in the art".

Applicant's representative fails to see the relevance of this blanket statement that each element that is not taught nor suggested in the cited references is well known in the art, and that any type of wireless communication is well known in the art, and therefore, it appears from the Examiner's position that every wireless combination possible is now known in the art. The Examiner has not provided specific reasons of how and why one skilled in the art would desire to make the proposed modification of Pippen to make obvious the claims of the present invention, and therefore has not established a prima facie case of obviousness.

It appears that office action relies solely on the Examiner's personal knowledge that Pippen in view of Norris, when modified, with the 9 elements in which the Examiner takes official notice would make obvious the claims of the present application.

Applicant, at this time and pursuant to 37 C.F.R. §1.104(d)(2), requests an affidavit of the Examiner to support the Examiner's statement. In response for Applicant's request for providing evidence by the Examiner to the 9 elements in which the Examiner takes official notice, the Examiner cites 14 references without showing one instance of suggestion or motivation for combining these references to make obvious claims 1-7, 9, 11-16 and 20-25.

The applicant's representative, therefore, request that the Examiner provide some evidence of suggestion or motivation in the cited references or to that of ordinary skill in the art to support the proposed motivation or suggestion to combine the references to make obvious the 9 elements that the Examiner is taking official notice. Absent some support by evidence or technical reasoning, the Examiner's statement are

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at best mere speculation. It is well settled that speculation is not sufficient for establishing a prima facie case of obviousness. Ex parte Yamamoto, 57 USPQ2d 1383, 1384 (Bd. Pat. App. & Inter. 2001), citing In re Warner, 154 USPQ 173, 178 (CCPA 1967). Thus, without some basis in fact or technical reasoning to support the Examiners statement, the Office Action has failed to establish prima facie case of obviousness and withdrawal of the rejection is respectfully request.

Furthermore, the Examiner states that "Norris teaches broadcasting location information from the at least one portable device through a relay network and receiving location information from the at least one portable device via the relay network". Applicant's representative respectfully disagrees with this assertion. Norris specifically discloses that the second GPS device has a receiver for receiving transmitted data and location from the first GPS device via a transmitter of the first GPS device (See Norris FIG. 8 description). Neither Pippen nor Norris teach or suggest the use of a satellite relay network to transmit and receive location information between a portable devices, as recited in claims 1-7, 9-25.

Neither Pippen nor Norris teach or suggest a tablet computer assembly having an input/output board that regulates power and logic connections between a processing unit and the L-band transceiver, as recited in claim 4. The Examiner has not shown with specificity why one skilled in the art would modify Pippen or Norris to make obvious a tablet computer assembly having an input/output board that regulates power and logic connections between a processing unit and the L-band transceiver, as recited in claim 4. Therefore, the Examiner has not established a prima facie case of obviousness with respect to claim 4.

Neither Pippen nor Norris teach or suggest a tablet computer assembly having a Faraday cage that encloses a L-band transceiver to reduce electromagnetic interference, as recited in claim 9. The Examiner has not shown with specificity why one skilled in the art would modify Pippen or Norris to make obvious a tablet computer having a Faraday cage that encloses a L-band transceiver to reduce electromagnetic

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interference, as recited in claim 9. Therefore, the Examiner has not established a prima facie case of obviousness with respect to claim 9.

Neither Pippen nor Norris teach or suggest a tablet computer assembly having software means comprising means for providing user control of the power consumption of at least one of the means for transmitting, the means for determining, and the means for displaying, as recited in claim 24. The Examiner has not shown with specificity why one skilled in the art would modify Pippen or Norris to make obvious a tablet computer having software means comprising means for providing user control of the power consumption of at least one of the means for transmitting, the means for determining, and the means for displaying, as recited in claim 24. Therefore, the Examiner has not established a prima facie case of obviousness with respect to claim 24.

Neither Pippen nor Norris teach or suggest a tablet computer assembly having software means comprising means for adjusting power consumption for at least one of the means for transmitting, the means for determining, and the means for displaying in response to at least one predetermined condition, as recited in claim 25. The Examiner has not shown with specificity why one skilled in the art would modify Pippen or Norris to make obvious a tablet computer assembly having software means comprising means for adjusting power consumption for at least one of the means for transmitting, the means for determining, and the means for displaying in response to at least one predetermined condition, as recited in claim 25. Therefore, the Examiner has not established a prima facie case of obviousness with respect to claim 25.

For the reasons described above, the Examiner has not establishes a prima facie case obviousness and claims 1-7, 9, 11-16 and 20-25 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

## II. Rejection of Claim 10 Under 35 U.S.C. §103(a)

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Claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Pippen in view of Norris as applied to claim 9, and further in view of U.S. Publication No. 2003/0017646 to Sridharan, et al. ("Sridharan"). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 10 depends from claim 9, and further recites a tablet computer that comprises Faraday cage being configured as a heat sink to draw heat from the L-band transceiver away from the processing unit.

The Examiner admits that neither Pippen nor Norris disclose the limitations of claim 10. The Examiner cites Sridharan disclosing a faraday cage as a heat sink to make obvious claim 10. Shridharan discloses a ball grid array package that includes an external faraday cage formed around an integrated circuit. The Examiner states that it would be obvious to one of ordinary skill in the art at the time the invention was made because it would limit interference while utilizing internal chip structures which would decrease costs. Applicant's representative disagrees with this asserted suggestion or motivation. Shridharan discloses a ball grid array package or integrated circuit. There is no suggestion or motivation in Shridharan to modify Pippen nor Norris to include a Faraday cage that surrounds a L-band transceiver that is configured operate as a heat sink to draw heat from the transceiver away from the processing unit, as recited in claim 10. There is no discussion of practical use of internal chip structures in either the present application, Pippen or Norris.

Neither Norris nor Pippen disclose the use of a Faraday Cage for protecting a transceiver from other interfering outside RF signals nor a heat sink for isolating a transceiver assembly from a processor of the tablet. The present invention employs a L-band transmitter that is substantially sensitive to outside RF signals and draws a substantially amount of heat since it requires a substantial amount of power to transmit to a satellite through the atmosphere into space. This heat can affect the performance of the tablet processor. The communication devices taught in Pippen and Norris are likely at frequencies that do not require shielding of respective transceivers and likely at

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transmission powers that do not require the heat sinking of the transceivers, since they operate at relatively close ranges. Therefore, there is no desire or motivation to modify Pippen and Norris in view of Shridharan to make obvious claim 10.

Additionally, Shridharan is non-analogous art in that one skilled in the art would not look to ball-grid arrays to solve the high power heat problem and frequency sensitivity of the tablet computer assembly with satellite transmission capabilities. See, for example, Wang Laboratories, Inc. v. Toshiba Corp., 993 F.2d 858, 26 USPQ2d 1767 (Fed. Cir. 1993) (Patent claims were directed to single in-line memory modules (SIMMs) for installation on a printed circuit motherboard for use in personal computers. Reference to a SIMM for an industrial controller was not necessarily in the same field of endeavor as the claimed subject matter merely because it related to memories. Reference was found to be in a different field of endeavor because it involved memory circuits in which modules of varying sizes may be added or replaced, whereas the claimed invention involved compact modular memories. Furthermore, since memory modules of the claims at issue were intended for personal computers and used dynamic random-access-memories, whereas reference SIMM was developed for use in large industrial machine controllers and only taught the use of static random- accessmemories or read-only-memories, the finding that the reference was nonanalogous was supported by substantial evidence.)

For the reasons described above, claim 10 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

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#### HI. Rejection of Claims 17-19 Under 35 U.S.C. §103(a)

Claims 17-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Pippen in view of Norris as applied to claim 16, and further in view of U.S. Publication No. 2005/003253 to Kokkonen, et al. ("Kokkonen"). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 17 depends on claim 16 and further recites encoding routing information within the L-band broadcast of the determined location. Claims 18 and 19 depend directly or indirectly from claim 17.

The Examiner admits that neither Pippen nor Norris disclose the limitations of claim 17. The Examiner cites Kokkonen to disclose encoding routing information to make obvious claim 17.

Applicant's representative respectfully disagrees. No where does Kokkonen disclose encoding routing information. Kokkonen discloses verifying and initiating provision of location information that is associated with a target user based on determining if identifying information in the request is associated with someone authorized to receive the location information. None of the signaling, the request or the location information is encoded. Additionally, there is no motivation or suggestion in Kokkonen to modify Pippen or Norris to encode data transmission in the GPS devices for use in a golf course setting. Therefore, one skilled in the art would not be motivated to encode and secure the transmission of points on the golf course from other golfers.

For the reasons described above, claims 17-19 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

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## CONCLUSION

In view of the foregoing remarks, Applicant respectfully submits that the present application is in condition for allowance. Applicant respectfully requests reconsideration of this application and that the application be passed to issue.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

Date 8-15-06

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